

CLAIMS

WHAT IS CLAIMED IS:

1. A cyclone separating apparatus comprising:
a first cyclone separating dust from dust-ladened air;
a plurality of second cyclones centrifugally separating fine dust particles from air which is first separated at the first cyclone; and
a dust collecting unit detachably connected to the first and the second cyclones, and separately collects large dust particles separated at the first cyclone and fine dust particles separated at the second cyclone.
2. The cyclone separating apparatus of claim 1, wherein the dust collecting unit comprises:
a first dust receptacle for collecting dust separated at the first cyclone; and
a second dust receptacle for collecting dust separated at the second cyclone.
3. The cyclone separating apparatus of claim 2, wherein the first and the second dust receptacles include a cylindrical shape.
4. The cyclone separating apparatus of claim 3, wherein the first dust receptacle is disposed inside the second dust receptacle, and is integrally formed therewith.
5. The cyclone separating apparatus of claim 4, wherein the first dust receptacle includes a first sealing member at an upper part, which is hermetically connected to the first cyclone, and
the second dust receptacle includes a second sealing member at an upper part, which is hermetically connected to the second cyclone.

6. The cyclone separating apparatus of claim 5, wherein the first and the second dust receptacles, respectively, include at least one transparent or translucent part on sidewalls thereof.

7. The cyclone separating apparatus of claim 6, wherein the second dust receptacle includes a handle on the sidewall.

8. The cyclone separating apparatus of claim 3, wherein the first cyclone comprises:
a first chamber centrifugally separating dust-laden air;
a first inlet formed at the first chamber to draw-in the dust-laden air; and
a first outlet formed at the first chamber to discharge air.

9. The cyclone separating apparatus of claim 8, wherein the respective second cyclones comprise:

a second chamber centrifugally separating air which is first separated at the first cyclone;
a second inlet formed at the second chamber to draw-in air which is discharged from the first cyclone; and

a second outlet formed at the second chamber to discharge dust-separated air.

10. The cyclone separating apparatus of claim 9, wherein the first chamber is formed in a cylindrical shape, and the second chamber includes a predetermined part of one end of a truncated conical shape.

11. The cyclone separating apparatus of claim 3, wherein the cyclone separating apparatus

further comprises:

an inflow and outflow cover formed at a top of the first and the second cyclones, and fluidly-connects the first and the second cyclones; and

a cyclone cover formed over the inflow and outflow cover.

12. The cyclone separating apparatus of claim 11, wherein the cyclone cover includes a cone shape which opens upwards and downwards.

13. The cyclone separating apparatus of claim 12, wherein the second cyclones are disposed on an outer circumference of the first cyclone to enclose the first cyclone, and the first cyclone is integrally formed with the second cyclones.

14. The cyclone separating apparatus of claim 13, wherein cyclone partitions are formed between the respective second cyclones.

15. A vacuum cleaner comprising:

a cleaner body drawing-in dust-laden air, and generating a suction force;

a suction brush fluidly-connected to the cleaner body to draw-in dust from a cleaning surface using the suction force; and

a cyclone separating apparatus formed in the cleaner body, wherein the cyclone separating apparatus comprises:

a first cyclone separating dust from dust-laden air;

a plurality of second cyclones centrifugally separating fine dust particles from air which is first separated at the first cyclone; and

a dust collecting unit detachably connected to the first and the second cyclones, and separately collecting large dust particles separated at the first cyclone and fine dust particles separated at the second cyclone.

16. The vacuum cleaner of claim 15, wherein the dust collecting unit comprises:
a first dust receptacle for collecting dust separated at the first cyclone; and
a second dust receptacle for collecting dust separated at the second cyclone.